CANADA - NOVA SCOTIA

FLOOD DAMAGE REDUCTION PROGRAM

Annual Report

For Year Ending March 31, 1985

Environment Canada

Nova Scotia Department of the Environment

INTRODUCTION

The Flood Damage Reduction Program results from the recognition by Canada and Nova Scotia that floods causing personal injury and destruction of property constitute a serious problem: There are a variety of ways such damage can be reduced or avoided, and these can be identified and used to effect savings to the public purse and private individuals.

The first step in this program is to identify risks and to map the lands and properties that will be inundated by floods. These lands are designated by the Ministers with the intent of discouraging future unprotected development in these areas.

A subsequent step is to identify means by which flood damage to existing development may be reduced or avoided. Extensive works such as dams, dykes, bypass channels and the like, which have been used frequently in the past in attempts to control flooding, are not recommended unless benefits will exceed costs. This program will give equal attention to alternate measures such as contingency planning, land use control, organization of response teams, and improved maintenance of existing protection facilities.

The objective of this program is to have implemented various measures that will result in less damage and waste of public and private resources than would occur if present practices and trends continue unchanged.

ORGANIZATION

The General, the Flood Risk Mapping, and the Studies agreements were renegotiated during the year. The General Agreement expires in 1994, and the Flood Risk Mapping and Studies agreements expire in 1989. Funding for the whole life of the program was increased from $900,000 to $1,600,000.

Administration of the program is the responsibility of the federal and provincial Ministers of the Environment. Each has appointed two members to a Steering Committee that is chaired by a provincial appointee and oversees the entire program.

Three committees are responsible to the Steering Committee: one Technical Committee supervises the work under the Mapping Agreement, and the other supervises the work under the Studies Agreement. The Public Information Committee focusses on creating public awareness of the program.

In fiscal year 1984/85, representation on these committees was as follows:

Steering Committee

John F. Jones, N.S. Dept. of the Environment, Chairman

David L. Egar, Environment Canada
Clinton J. Edmonds, Environment Canada
Ronald G.W. Simpson, N.S. Dept. of Municipal Affairs
H.T. Doane, Secretary

Technical Committee - Mapping

H.T. Doane, Program Manager, Chairman
L.R. Lewis, N.S. Dept. of the Environment
J.D.A. Keefe, Environment Canada
D.E. English, N.S. Dept. of Municipal Affairs
D.G. Anderson, Energy, Mines & Resources Canada
E.R. Langley, Secretary

Technical Committee - Studies

H.T. Doane, Program Manager, Chairman
L.R. Lewis, N.S. Dept. of the Environment
J.D.A. Keefe, Environment Canada
D.E. English, N.S. Dept. of Municipal Affairs
D. Smith, Public Works Canada
E.R. Langley, Secretary

Public Information Committee

P.C. LeBlanc, Environment Canada, Chairman
J.D.A. Keefe, Environment Canada
R. Hand, N.S. Dept. of the Environment
H.T. Doane, Program Manager

PROGRESS IN 1984-85

During the year, there were no major floods in the province. However, ice jams caused local flooding in the Truro area by backing up water on Farnham Brook.

Expenditures were low during the year due to the expiry of the original agreements. These were renewed on September 10, 1984.

Work continued on the Truro Hydrotechnical Study. The study and public information maps were not completed as anticipated due to problems encountered with the field data used for the study.

The study of remedies for flood damage near Mill (Dodge) Brook, Kentville, was completed and copies were distributed to the Town Council and other interested parties. In addition to identifying flood risk areas, the study enables decisionmakers for the Town to clearly assess the options available to them in dealing with the flooding problem. The study concluded that the cost of remedial works would exceed the benefits resulting from reduced flood damage.

Public information maps for the East River of Pictou County and for the Antigonish area were published and distributed early in the year. These show areas designated effective February 28, 1984.

Terms of reference were prepared and proposals were received from several consulting engineering firms to conduct a hydrotechnical study of the Little Sackville River. At year's end a consultant was chosen by the Steering Committee and a contract recommendation was being prepared for the provincial Management Board. Topographical maps were prepared for the area in previous years.

Work was initiated on a videotape production aimed at informing the public of the objectives of the program and improving its image.

EXPENDITURES

Approximately $19,000 was spent during the year on professional services. Unlike previous years, no expenditures were charged to the program for administrative costs. Although work was not carried out on a high level of intensity, the expenditure recorded is an unduly low indication of work performed during the year because provincial and federal staff time for the Truro study was not charged to the program.

The $19,000 spent was less than the $75,000 budgeted, due to the extension agreement not being signed as quickly as anticipated and to technical difficulties encountered in the Truro project.

The table that follows sets out expenditures for the current year and for the program to date.

PROGRAM EXPENDITURES

Project	Previous Expenses	Current Year 1984-85	Total to March 31/85
Hydrology			
Regional flood frequency analysis	82,710	—	82,710
Truro Area			152,152
Base maps	33,156		
Hydrotechnical studies	118,974	22	
Bedford/Sackville Area			106,988
Base maps	37,739		
Hydrotechnical study	47,199		
Working maps	10,058		
Public information maps	10,685	1,307	
New Glasgow/Stellarton Area			85,840
Base maps (East River)	16,837		

Hydrotechnical study	53,599		
Working maps (1:2,000)	5,289		
Public information maps	10,115	—	
Antigonish Area			147,847
Base maps	27,042		
Hydrotechnical study	106,095		
Public information maps	—	14,710	
Kentville Area			
Mill Brook remedy study	40,971	—	40,971
Administration			
Public information (general)	—	3,501	3,501
Energy, Mines & Resources Canada	8,750		8,750
Salaries, expenses	314,367	(706)*	313,661
TOTALS	923,586	18,834	942,420

* Adjustments due to previous error detected by auditor.

OUTLOOK FOR 1985-86

The videotape production will be completed and, together with the static display previously produced by the Inland Waters Directorate, actively used to promote public awareness of the program.

The Truro area hydrotechnical study will be completed and working maps will be prepared for use by municipal, provincial and federal planners. Public information maps for use by the general public will be initiated.

The hydrotechnical study of the Little Sackville River will be conducted, subject to availability of adequate hydrologic data to calibrate the various models, and work will be initiated on the floodrisk working maps.

Aerial photography will be acquired, and maps of the Cornwallis River (Kentville) will be prepared, subject to availability of funds. Terms of reference will be prepared for a hydrotechnical study of this area, proposals sought and a contract awarded, subject to availability of funds.

The amount budgeted for fiscal year 1985-86 is $130 600. This is somewhat less than the amount anticipated when the extension agreement was drafted, due to restrictions on provincial funding, and will result in a reduction in the originally anticipated work output for 1985-86. The Truro, Little Sackville River and the Cornwallis River floodrisk areas remain to be identified and designated. Remedial measures studies are planned for Truro, Antigonish and Little Sackville River.

This program is sponsored and directed by:

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